

ALIPHATIC POLYESTER MICROFIBERS, MICROFIBRILLATED ARTICLES AND USE THEREOF

Abstract

5 The present invention relates to aliphatic polyester microfibers, films having a
microfibrillated surface, and methods of making the same. Microfibers of the invention
can be prepared by imparting fluid energy, typically in the form of high-pressure water
jets, to a highly oriented, highly crystalline, aliphatic polyester film to liberate microfibers
therefrom. Microfibrillated films of the invention find use as tape backings, filters for
10 particulate contaminants, such as face masks and water or air filters, fibrous mats, such as
those used for removal of oil from water and those used as wipes, and thermal and
acoustical insulation. Microfibers of the invention, when removed from the film matrix
may be used in the preparation of woven or nonwoven articles and used as wipes for the
removal of debris or dust from a surface. The microfibers and microfibrillated articles of
15 the invention may be biodegradable, rendering them useful for geotextiles.